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| **Executive Summary**  **Generation:** Net generation in the United States was up 0.8 percent from January 2010 to January 2011. The National Oceanic and Atmospheric Administration (NOAA) reported that the average January temperature across the contiguous United States was the lowest since 1994, breaking a long string of warm or near normal Januaries, and as such, heating degree days were 4.3 percent higher than the normal January level. The Federal Reserve reported that industrial production was 5.2 percent higher than it had been in January 2010, the thirteenth consecutive month that industrial production was higher than it had been in the corresponding months of the previous year.  The rise in conventional hydroelectric generation was the largest absolute "fuel-specific" increase as generation was up 3,590 thousand megawatthours, or 16.2 percent. The largest rises were in Washington, California and Oregon. NOAA reports that many locations in the west lost snow during what was a dry January, and the drop in snowpack in California was characterized as "significant." The next largest increase was in wind generation, as it was up 27.6 percent or 1,923 thousand megawatthours. Washington, Wyoming, and Colorado showed the largest increases. The higher total in Wyoming is primarily attributable to the generation from the Top of the World and Dunlap facilities, which came on-line in October 2010.  Coal-fired generators showed the largest fuel-specific decline from January 2010 to January 2011 as their generation was down 2,259 thousand megawatthours, or 1.3 percent. The drops in West Virginia and Florida accounted for 76.3 percent of the national decline in coal-fired generation. Lower petroleum liquid-fired generation accounted for the second-largest fuel-specific drop as it was down 1,331 thousand megawatthours or 42.0 percent. Declines in petroleum liquid-fired generation in Florida were by far the largest in the Nation as temperatures in the Sunshine State were more moderate than they had been in January 2010 and demand for electricity from Florida generators was lower. The overall share of net generation from petroleum liquid-fired sources continued to be quite small compared to coal, nuclear, natural gas-fired, and hydroelectric sources. Figure 1 shows net generation by month for the last 12 months.   |  | | --- | | **Figure 1: Net Generation by Major Energy Source:**  **Total (All Sectors), February 2010 through January 2011** | |  |   In January, coal-fired plants contributed 47.1 percent of the power generated in the United States. Natural gas-fired plants contributed 20.4 percent, and nuclear plants contributed 20.0 percent. Of the 0.9 percent contributed by petroleum-fired plants, petroleum liquids represented 0.5 percent, with the remainder from petroleum coke. Conventional hydroelectric sources provided 7.1 percent of the total, while other renewables (biomass, geothermal, solar, and wind) and other miscellaneous energy sources generated the remaining 4.5 percent of electric power (Figure 2).   |  | | --- | | **Figure 2: Net Generation Shares by Energy Source:**  **Total (All Sectors), Year-to-Date through January, 2011** | |  |   **Consumption of Fuels:** Consumption of coal for electric power generation in January 2011 was down 0.5 percent compared to January 2010. Consumption of natural gas fell 0.8 percent. For the same time period, consumption of petroleum liquids was down 42.0 percent, while petroleum coke was up 20.1 percent.  **Fuel Stocks, Electric Power Sector, January 2011**  Total electric power sector coal stocks decreased between January 2010 and January 2011 by 7.3 percent, or 13.0 million tons.  January was the ninth consecutive month that total coal stocks were lower than the same month in the prior year after 20 consecutive months where they were higher. Stocks of bituminous coal fell 11.4 percent or 9.8 million tons between January 2010 and January 2011 (from 86.3 million tons to 76.4 million tons). Subbituminous coal stocks fell 5.4 percent over the same period (from 87.0 to 82.3 million tons).  Electric power sector liquid petroleum stocks totaled 35.6 million barrels at the end of January 2011, a decrease of 5.3 percent (2.0 million barrels) from January 2010. January 2011 stocks were 1.5 percent (0.5 million barrels) lower than at the end of December 2010.  **Fuel Receipts and Costs, All Sectors, January 2011**  **Overall Receipts and Costs:** In January 2011, the overall average price paid by electricity generating plants for fossil fuels (coal, petroleum, and natural gas) was $3.37 per MMBtu. This was 1.8 percent higher than the price paid in December 2010 ($3.31 per MMBtu) and 9.7 percent lower than the January 2010 price of $3.73 per MMBtu (Figure 3).  Receipts (physical units) of petroleum increased slightly over the previous month, while receipts of coal and natural gas decreased. When compared to January 2010, it was the opposite pattern. Receipts of petroleum decreased, while receipts of coal and natural gas increased.  **Coal:** The average price paid for coal in January 2011 was $2.34 per MMBtu, up 4.9 percent from the average price of $2.23 per MMBtu paid in December 2010, and up 5.4 percent from the average price of $2.22 per MMBtu paid in January 2010. Receipts of coal in January 2011 were 80.8 million tons, down 2.1 percent when compared with December 2010 receipts (82.5 million tons), and up 4.5 percent when compared with January 2010 receipts (77.3 million tons).  **Petroleum:** The average price paid for petroleum liquids in January 2011 was $16.49 per MMBtu, up 0.1 percent from the average price of $16.48 per MMBtu paid in December 2010, and up 22.7 percent from the average price of $13.44 per MMBtu paid in January 2010. Receipts of petroleum liquids in January 2011 were 3.8 million barrels, up 1.0 percent when compared with December 2010 receipts (3.7 million barrels), and down 34.4 percent when compared with January 2010 receipts (5.7 million barrels).  **Natural Gas:** The average price paid for natural gas in January 2011 was $5.37 per MMBtu, down 0.7 percent from the average price of $5.41 per MMBtu paid in December 2010, and down 19.9 percent from the average price of $6.70 per MMBtu paid in January 2010. Receipts of natural gas in January 2011 were 658.9 million Mcf, down 2.2 percent when compared with December 2010 receipts (673.5 million Mcf), and up 0.6 percent when compared with January 2010 receipts (654.7 million Mcf).   |  | | --- | | **Figure 3: Electric Power Industry Fuel Costs, February 2010 through January 2011** | |  |   **Sales, Revenue, and Average Retail Price, January 2011**  The average retail price of electricity for January 2011 was 9.62 cents per kilowatthour (kWh), 1.2 percent higher than December 2010 when the average retail price of electricity was 9.51 cents per kWh, and 3.0 percent higher than January 2010, when the price was 9.34 cents per kWh. Total retail sales between January 2010 and January 2011 increased 0.7 percent led by a 5.3-percent increase in the industrial sector. Over the same period, retail sales in the residential and commercial sectors decreased 1.0 and 0.1 percents, respectively. The average price of residential electricity for January 2011 increased to 10.99 cents per kWh from January 2010, a 4.1-percent increase year-over-year, and decreased 0.5 percent from December 2010.  **Sales:** For January 2011, sales in the residential sector decreased by 1.0 percent from January 2010, but increased 12.3 percent from December 2010, as the more densely populated eastern part of the Nation experienced monthly temperatures that were significantly below normal. Industrial sector sales increased 5.3 percent from January 2010 but decreased 0.9 percent from December 2010. Sales in the commercial sector decreased by 0.1 percent from January 2010, but increased slightly from December 2010. For January 2011, total retail sales were 334.0 billion kWh, an increase of 0.7 percent from January 2010, while increasing 4.8 percent from December 2010.  **Revenue:** Total retail revenues in January 2011 were $32.1 billion, reflecting an increase of 3.7 percent from January 2010, and a 6.1-percent increase from December 2010. For January 2011, residential, commercial, and industrial revenues increased by 3.0, 2.5, and 8.6 percents, respectively from January 2010. Over the same period, transportation sector retail revenues decreased by 5.3 percent.  **Average Retail Price:** For January 2011, the average residential retail price increased by 4.1 percent from January 2010 to 10.99 cents per kWh, and decreased by 0.5 percent from 11.04 cents per kWh in December 2010. The January 2011 average commercial sector retail price was 9.88 cents per kWh, increasing 2.6 percent from January 2010, and 0.7 percent higher than in December 2010. The average industrial sector retail price for January 2011 was 6.73 cents per kWh, a 3.1-percent increase from January 2010 and a 2.1-percent increase from December 2010.   |  | | --- | | **Figure 4: Average Retail Price of Electricity to Ultimate Customers by End-Use Sector,**  **Year-to-Date through January 2011 and 2010** | |  | |